

REMARKS

Applicant has amended claim 9 to correct a typographical error; the claims are otherwise not amended. Applicant thanks the Examiner for indicating that claims 12 and 13 are allowable but declines to rewrite those claims in independent form at this time due to the allowability of their base claims as shown below.

In response to the previous Action, applicant amended independent claim 4 to specify that the shaped product or structure is “shaped from natural coral skeletons” of the species *Acropora grandis*. In the pending Action, the Examiner stated at the bottom of page 4 that this language “does not exclusively limit the product to be made entirely of unaltered coral.” This interpretation is unreasonable and does not serve to distinguish White and the other prior art in any event. If a shaped product or structure is “shaped from natural coral skeletons,” that reasonably means that the product or structure is made from coral skeletons which are “natural,” i.e., as occurring unaltered in nature, coral skeletons. The claim language as it stands suffices to make applicant’s point; the Examiner’s interpretation of it overlooks the clear meanings of the words used by applicant to describe his invention.

Claims 4-7 and 11 stand rejected under 35 USC 102(e) as anticipated by White. This rejection is respectfully traversed.

White does not describe a shaped product formed from natural coral skeletons. White discloses a synthetic phosphate material, which can be prepared from a porous calcium carbonate material such as coral. White does not disclose forming a shaped product of coral skeletons themselves, but only discloses using coral as a starting material for the preparation of porous calcium phosphate products. What White does, as explained at column 5, lines 42-61, is to take bulk coral material, prepare it by removing organic material, subject that bulk material to hydrothermal chemical exchange to convert the bulk mass to hydroxyapatite and then shape the converted hydroxyapatite material into cylinders, screws, bolts etc. The only shaped articles or products White discloses are made from chemically converted coral, not the natural coral

skeletons which White converts to hydroxyapatite *before* shaping them into products. In other words, White does not disclose shaped articles or products of natural coral *per se* and instead suggests that shaped articles or products should be made from converted hydroxyapatite masses.

The Examiner also appears to recognize on page 2 of the Action that White does not disclose the specific use of coral from the species *Acropora grandis* as claimed, which is another reason why White cannot anticipate claim 4. Thus, even under the Examiner's unreasonably broad reading of the claims, White fails to disclose identically the claimed articles and products. The rejection of claims 4-7 and 11 as anticipated by White should be withdrawn.

Claims 4-7 and 11 also stand rejected under 35 USC 103(a) on AIMS by itself. This is a different rejection from what was stated in the previous Action, where the Examiner combined White with AIMS to reject claims 4-7 and 11 as obvious. Although it seems from page 3, lines 1-5, of the Action that the Examiner intended to repeat the prior rejection, he did not state such a rejection in specific terms. Applicant is entitled to rely on the Examiner's statement of the rejection and not to surmise as to what the Examiner intended. This rejection is respectfully traversed.

The AIMS article, which describes activities of applicant himself, does mention *Acropora grandis* as a fast growing coral species, but it does not say a word even remotely connected to making the claimed shaped articles or products from natural *Acropora grandis* skeletons. The Examiner has failed to explain how a person of ordinary skill in the art could have gotten from AIMS to the claimed invention, and applicant submits that AIMS falls far short of demonstrating the unpatentability of claims 4-7 and 11. This rejection should be withdrawn. Applicant notes in the interest of completeness that AIMS does not overcome the deficiencies of White discussed above, so the Examiner should not recast the rejection of claims 4-7 and 11 as being over the combination of White and AIMS in a subsequent Action.


Claims 8-10 stand rejected under 35 USC 103(a) as being unpatentable over White and AIMS in view of Laurencin. The Examiner relies on White and AIMS as applied against claims

4-7 and 11 and cites Laurencin as showing the use of antibiotics or growth factor incorporated into a hydroxyapatite bone composite. This rejection is respectfully traversed not only because White and AIMS fail to provide the disclosures for which they are cited but also because Laurencin does not suggest using antibiotics or growth factors in coral-derived shaped articles. This rejection should be withdrawn as well.

In view of the foregoing, early action allowing claims 4-13 is solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. 229752001000.

Respectfully submitted,



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